

UNCLASSIFIED

AD NUMBER
AD513366
CLASSIFICATION CHANGES
TO:                    unclassified
FROM:                confidential
LIMITATION CHANGES
TO: Approved for public release, distribution unlimited
FROM: Controlling DoD Organization. Assistant Chief of Staff for Force Development [Army], Washington, DC 20310.
AUTHORITY
31 Dec 1973, GDS, DoD 5200.1-R; AGO D/A ltr, 11 Jun 1980

THIS PAGE IS UNCLASSIFIED

UNCLASSIFIED

AD NUMBER
AD513366
CLASSIFICATION CHANGES
TO
confidential
FROM
secret
AUTHORITY
31 Jul 1970, DoDD 5200.10

THIS PAGE IS UNCLASSIFIED

THIS REPORT HAS BEEN DELIMITED  
AND CLEARED FOR PUBLIC RELEASE  
UNDER EOD DIRECTIVE 5200.20 AND  
NO RESTRICTIONS ARE IMPOSED UPON  
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;  
DISTRIBUTION UNLIMITED.

# **GENERAL DECLASSIFICATION SCHEDULE**

**IN ACCORDANCE WITH  
DOD 5200.1-R & EXECUTIVE ORDER 11652**

## **THIS DOCUMENT IS:**

**CLASSIFIED BY** DDC

**Subject to General Declassification Schedule of  
Executive Order 11652-Automatically Downgraded at  
2 Years Intervals-DECLASSIFIED ON DECEMBER 31, 73.**

**BY**

**Defense Documentation Center  
Defense Supply Agency  
Cameron Station  
Alexandria, Virginia 22314**

# **SECURITY**

---

# **MARKING**

**The classified or limited status of this report applies to each page, unless otherwise marked.**

**Separate page printouts MUST be marked accordingly.**

---

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U.S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.



DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY VIETNAM  
APO SAN FRANCISCO 96375

IN REPLY REFER TO  
AVHGC-DST

110-0-0-0  
**INDEXED**

21 AUG 1967

SUBJECT: Senior Officer Debriefing Report

TO: Assistant Chief of Staff for Force Development  
Department of the Army  
Washington, D.C. 20310

AD No. **AD513366**

DDG FILE COPY

1. Attached are three copies of the Senior Officer Debriefing Report prepared by Lieutenant General Stanley E. Larsen, Commanding General, I Field Force Vietnam as prescribed by AR 1-26.

2. General Larsen is recommended for oral debriefing by the Department of the Army Staff and as a candidate speaker at the National Interdepartmental Seminar, the Defense Intelligence School, or the Military Assistance Institute.

FOR THE COMMANDER:

*[Signature]*  
E. L. KENNEDY  
Cpt. MC  
Asst Adjutant General

seen by Comd GP B  
17 Oct 67  
12591  
12511

ARV673-2511

*Cy Left - Cy  
Series C*

REMOVED UNCLASSIFIED WHEN SEPARATED  
FROM CLASSIFIED INCLOSURES

FOR AT III

**CONFIDENTIAL**

2915809  
15

Best Available Copy

~~CONFIDENTIAL~~  
DEPARTMENT OF THE ARMY  
Headquarters, I Field Force Vietnam  
APO 96350

AVFA-CG

31 July 1967

SUBJECT: Senior Officer Debriefing Report (RCS-CSFOR-74)

TO: Commanding General  
United States Army Vietnam  
ATTN: AVHGC-DH  
APO 96375

1. (U) References:
  - a. AR 1-26, Senior Officer Debriefing Program.
  - b. USARV Regulation Number 1-3, dated 29 March 1967, subject: Senior Officer Debriefing Program.
2. (U) Attached as an inclosure hereto is subject report (RCS-CSFOR-74) which covers those activities which have taken place in II Corps Tactical Zone from August 1965 through July 1967.
3. (U) Submitted as annexes A through R to the report are specific subject areas which I deemed appropriate to comment upon because of their significance to the conduct of the war.

1 Incl  
as

*Stanley R. Larsen*  
STANLEY R. LARSEN  
Lieutenant General, USA  
Commanding

~~CONFIDENTIAL~~  
~~ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED~~  
~~DATE 10/11/67 BY 1045~~

AVC-67-S 25529

Regraded UNCLASSIFIED  
When Separated From  
Classified Inclosures

Downgraded at 3 Year Intervals.  
Declassified After 12 Years.  
DOD DIR 5200.10

~~CONFIDENTIAL~~  
~~SECRET~~

ARV67S-2511

FFS-1268-67

2915009

Best Available Copy

COPY 25

DEBRIEFING REPORT (G)

(RCS-CSFOR-74)

COUNTRY: Republic of Vietnam

DEBRIEF REPORT BY: Lieutenant General Stanley R. Larsen

DUTY ASSIGNMENT: Commanding General, I Field Force Vietnam

INCLUSIVE DATES: 1 August 1965 through 31 July 1967

DATE OF REPORT: 31 July 1967

INDEX

SUBJECT

ANNEX

Report	
Intelligence	A
Strategy	B
Artillery	C
Tactical Air Support	D
Role as Senior Advisor	E
Relations with ROKFV	F
Civil Affairs	G
Revolutionary Development	H
Signal	I
Helicopters	J
Airfields	K
Defoliation Program	L
Personnel Rotational Hump Periods	M
Prisoners of War	N
Transportation	O
Supply	P
Maintenance	Q
Medical	R



~~SECRET~~  
~~CONFIDENTIAL~~

REPORT OF ACTIVITIES - II CORPS TACTICAL ZONE

August 1965 - July 1967

1. (U) This report is a summary of activities which have taken place in II Corps Tactical Zone from August 1965 to the present. Initially my command consisted of Task Force Alpha, later renamed Field Force Vietnam and, still later, became I Field Force Vietnam.
2. (U) The activities which I shall cover are only those which involve US military activities and those other activities in II Corps Tactical Zone in which US interests are involved, such as advising II Corps Commander and supporting operationally the two ROK divisions in II Corps Tactical Zone.
3. (C) When I assumed command of US Army forces in II Corps Tactical Zone in August 1965, COMUSMACV directed that our primary combat mission was to search out and destroy, wherever we found them, the hard core enemy consisting of NVA and Main Force units in II Corps Tactical Zone. That directive has never been changed and the successes that have been enjoyed against the enemy in II CTZ can be attributed in large measure to the efforts that have gone into carrying out the goals set by this directive. In other words, our mission has been to orient our military efforts against the enemy and not base it on terrain or on the defense of populated areas.
4. (C) Initially the US problem was to find out exactly where the hard core enemy was located. Although we had much evidence where he was, there was little specific location and even less specific identification of the enemy. The second problem was to develop techniques for attacking him, based on US Army capabilities. The only techniques we had to go on initially were those which had been devised by the ARVN forces and too many of them, of necessity, had been developed around minimum air support, minimum artillery support, minimum flexibility and relatively poor training.
5. (U) Beginning with the battle of the Ia Drang in October-November 1965, when the 1st Cavalry Division decimated three NVA regiments, our own techniques rapidly took form and, since that time, the chain of unbroken successes which our forces have enjoyed over a span of two years has proven the correctness of our methods of operation.
6. (C) In the original plan for US operations in II Corps Tactical Zone, it was envisioned that the ARVN forces would initiate operations against the hard core and that US forces would support them

SPECIAL HANDLING REQUIRED

1

NOT RELEASABLE TO FOREIGN NATIONALS

Downgraded at 3 yr intervals.

BY AUTHORITY OF CG I FFORCEV

Declassified after 12 years.

DATE 30 Jul 67

FOR DT UT  
67B011

CDC Repto

Docu: 43865

Best Available Copy

SECRET

whenever and wherever necessary. It became obvious, however, in the battle of the Ia Drang that our capabilities were far greater than those of the ARVN and that, in fact, it would be more logical for US forces to shoulder the main offensives against the enemy and to bring in the ARVN forces whenever and wherever possible to work with our units. The refinement of this arrangement has evolved over the last two years and at the present time is working very successfully.

7. (S) The battle of the Ia Drang specifically identified the enemy on the Cambodian border in the Highlands. The enemy force consisted of three NVA regiments, the 32d, 33d and 66th Regiments. Since the Fall of 1965 they have been reinforced at intervals by the 88th, 95B, and 101C Regiments; all of these forces have been grouped into two divisions, the 1st and 10th. These two divisions, in turn, have been controlled by the B3 Front located in Cambodia, but near the Vietnam border-Pleiku Province.

8. (S) In January, during Operation Masher-White Wing the 1st Cavalry Division verified the 3d NVA Division in Dinh Dinh Province, whose three regiments were 2nd VC, 18th NVA and 22nd NVA. This area became the second main area of hard core activity.

9. (S) The third major area of hard core enemy activity was found to be in Phu Yen Province. In January 1966 the 1st Brigade, 101st Airborne Division, in conjunction with the 2nd FDK Marine Brigade and the 47th ARVN Regiment, fixed the positions of the 95th NVA Regiment and later exposed the 183 NVA Regiment, as well as the 35th Local Force and 30th Main Force Battalions.

10. (S) Currently the enemy is located in II Corps Tactical Zone as follows: On the Pleiku-Cambodian border in the Highlands we carry the 32nd NVA, 66th NVA, 88th NVA, and 95B Regiments. The arrival of the 3/25th Brigade in January 1966 and the arrival of a major portion of the 4th Division in August 1966 made it possible for these two outstanding units to defeat and to keep these enemy units constantly on the border, while protecting the population base in the Highlands.

11. (S) A major portion of the 33d NVA Regiment is located in the vicinity of Highway 14, approximately 30 kilometers north of Ban Me Thuot. To date we have not been able to commit sufficient forces to go after this regiment which is suspected of trying to organize the Montagnards in Darlac and to lend support to local VC units in that area.

12. (S) The 24th NVA Regiment has been operating in Kontum Province since May 1966. In June of 1966 the 1/101st Airborne Division decimated a good portion of this regiment in the Tu Krong area and,

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCEV  
DATE 30 Jul 67

2

~~SECRET~~

Best Available Copy

CONFIDENTIAL

after that major contact, until June 1967, the 24th NVA Regiment was relatively inactive in Kontum Province. Since June of this year this regiment, along with the recently accepted 174th NVA Regiment and probably one other, have initiated what may well prove to be the opening phases of a major campaign in the Kontum area.

13. (S) In Binh Dinh beginning in September 1966, the 18th and 22nd NVA Regiments and 2nd VC Regiment have been reduced to a relatively ineffective status in a series of major operations including the 1st Cavalry Division, the 22nd ARVN Division, and the Capital ROK Infantry Division. Although the 18th NVA Regiment is still located in the heart of Binh Dinh, it is so weak that it is no longer a serious threat in the area. The 22nd NVA Regiment has been forced north to the I Corps-II Corps boundary and is also in weak condition as a result of the successful operations by the 1st Cavalry Division. The 2nd VC Regiment moved out of Binh Dinh into Quang Ngai Province with 750 personnel in November 1966 after taking a terrible shellacking by the 1st Cavalry Division. The mission of the 18th and 22nd NVA Regiments appears to be to stay in the general area of Binh Dinh at all costs, to lend support to the declining effectiveness of local VC forces and the infrastructure.

14. (S) The 95th NVA Regiment in Phu Yen was reduced to a strength of less than 900 by the end of 1966 after many engagements with elements of the 1/101st and later in contacts with the 1st Bde/4th Infantry Division. From November 1966 through early June 1967, there were no appreciable contacts between Free World Military Armed Forces and the 95th NVA Regiment. It is believed that this unit retreated far up into the Ky Lo Valley to nurse its wounds and to build back its strength with replacements from local forces and NVA. In early June 67, unidentified elements of the 5th Div, believed to be from the 95th Regiment, attacked CIDG units in the vicinity of Dong Tre. The regiment was identified as the unit in contact in the attack on Tuy Hoa on 16 June. At present, the 95th Regiment is being engaged by elements of the ROK forces in the HUB area. This campaign has undoubtedly thwarted a major effort on the part of the MR 5 to regain control of this heavily populated, rice rich coastal area.

15. (S) The 18B NVA Regiment, after its only major contact with US forces in the Dong Tre area of Phu Yen in June 1966, has not had any strong contacts with any Free World Military Armed Forces. It has deliberately avoided contact and currently is located in Khanh Hoa Province. From PW and other sources of information it is believed that the 18B NVA Regiment is low in morale, food, and effectiveness, and high in sickness. It is believed that both this regiment and the 95th NVA Regiment have the mission of bolstering the support and morale of local VC forces in Phu Yen and Khanh Hoa Provinces.

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCW  
DATE 30 July 1967

3

~~CONFIDENTIAL~~

Best Available Copy

~~SECRET~~  
~~CONFIDENTIAL~~

16. (U) During the two years that US forces have been employed in II Corps Tactical Zone, the enemy has never successfully initiated a major operation. On the other hand the long string of successes by US and Free World Military Armed Forces in II Corps Tactical Zone emphasizes the fact that we have been able to thwart every major scheme of maneuver prior to its execution that the enemy has attempted and, in beating him to the punch, we have inflicted severe losses on his forces.

17. (S) There are several contributing factors to the successes mentioned above:

a. The location of CIDG camps has materially assisted in detecting planned enemy moves before they could get set. Hawthorne, Crazy Horse, Nathan Hale, Paul Revere I, Paul Revere III, as specific examples, were successful major operations initiated by CIDG patrol actions.

b. Increased and more accurate intelligence, while still not the best, has improved each month and our many sources of good intelligence have assisted materially in verifying enemy locations and concentrations.

c. The more than 60 airfields located throughout II Corps Tactical Zone have made it possible, along with the many highways that have been opened to military traffic, to be able to support offensive operations, whenever and wherever required.

d. As a result of the build up of helicopter transport the flexibility of combat units has probably been the single most successful support contribution to success against the enemy. In my judgement, to have accomplished what we have in the past two years, it would have taken at least four times the number of combat troops that we have had to arrive at the current level of success in this tactical zone, if we had not had helicopters to support us.

e. The magnificent air support, both tactical and transport, can be attested to down to the last soldier in the front line. Here, too, flexibility of this support, especially its reaction time, has been a major contribution to the proper timing of the concentration of our combat troops at the right place with the right strength.

f. The rapid reaction time, the foresight in planning and the solid results obtained by engineer support units has made it possible for our combat units, wherever they are, to get essential resupply without fear of running short.

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCEV  
DATE 30 Jul 67

4

~~SECRET~~  
~~CONFIDENTIAL~~

Best Available Copy

~~SECRET~~

g. Communications. Although there were times early in the war when the communications were absolutely minimal, there never has been a break down in our ability to communicate between and among commands regardless of the location of the battle or the troops involved.

h. Cooperation and coordination with ARVN forces. Initially, there was some suspicion among ARVN personnel that the American forces coming to Vietnam would not be effective in battle. There was also doubt whether we had come in time and with sufficient force to do the GVN much good. I believe that the battle of the Ia Drang will go down as the turning point of the war, tactically, and in securing ARVN leaders' confidence in the Americans. Since March 1966 I could not have enjoyed better relations with any allied commander more than I have with Gen Vinh Loc, the Commander of II Corps Tactical Zone. While there have been differences of opinion from time to time, and while he has disposed his troops, on occasion, contrary to what I believed was in the best interest of the tactical situation, Gen Vinh Loc has acted with sincerity, trust and confidence in all his relationships with American commanders.

18. (U) At no time in the history of our country has the fighting man received the quality and quantity of supplies as he has received during the combat operations in Vietnam. There have been no instances where a tactical operation has been curtailed or cancelled because of a lack of logistical support. This achievement is due largely to the outstanding support provided by the 1st Logistical Command and the aggressive and continuous emphasis commanders, at all echelons, have placed on opening and securing lines of communications to allow a free and unhampered flow of supplies.

19. (U) The soldiers arriving from CONUS training centers have reached a new high in excellence. Commanders at all echelons describe the infantry replacement as being well trained, highly motivated, and able to function as a member of the squad after minimum in-country orientation. In March 1967 we pointed out to the USCONARC Training Team some areas that needed strengthening during the basic and advanced individual training cycle. Their trip report, furnished your headquarters with USCONARC cover letter dated 19 April 1967, contains valid recommendations for improvement in the CONUS training program.

20. (C) There may be feelings in some quarters that, by orienting our efforts initially against the hard core enemy, we have slighted the protection of the populated areas and may not have given them the proper degree of protection. The following results lend evidence that our efforts to date have directly benefitted the people as well as the military situation in II CTZ:

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORSEV  
DATE 20 Jul 67

5

~~SECRET~~  
CONFIDENTIAL

Best Available Copy

~~SECRET~~  
~~CONFIDENTIAL~~

a. The enemy has never won a meaningful victory in II CTZ in two years. His hard core units are suffering wherever they are. His replacement of personnel has not been able to keep pace with his losses. Current figures indicate that the cross over point has been reached in II Corps Tactical Zone; i.e.; that he is now losing more personnel than he can replenish. Nowhere is there evidence that his morale is high.

b. The incident rate in II Corps to date in 1967 amounts to 12.1% of the incidents throughout Vietnam. The incident rate in II Corps Tactical Zone is far less than in any other corps.

c. 89% of the highway system in II Corps is now in green or amber condition. This adds up to 1650 kilometers of road that is repaired and can be used during daylight hours. Most of this road net can be utilized by civilians and is free from tax collection by the enemy.

d. 53% of the railroad net is repaired and in use. This represents 350 kilometers.

e. 89% of the population of II Corps Tactical Zone is under US, ARVN or NOK military control and, when I say under military control, I mean that it will continue to be under the control and protection of military forces who are there to stay, not bouncing in and out on a temporary basis.

f. II Corps Tactical Zone has enjoyed the greatest measure of success in Hoi Chanks. In 1966 46% of the Chieu Hoi in Vietnam were in II Corps Tactical Zone and, while that percentage is not as high so far in 1967, II Corps Tactical Zone still enjoys numerically the largest number of Chieu Hoi of any other corps again this year.

g. In 1966 by far the largest number of PW's were captured in II Corps Tactical Zone representing nearly 38% of all the PW's captured throughout Vietnam. So far in 1967 the ratio is 42% of all the PW's in Vietnam.

h. 93% of all the rice producing area of II Corps Tactical Zone is under government control. This control, in turn, has caused the enemy to be woefully short of rice, something we thought would be impossible to accomplish a year ago.

21. (S) On the other side of the ledger there are still many problems which must be solved. I would place corruption by officials and the ferreting out of enemy infrastructure as two of the most

SPECIAL HANDLING REQUIRED 6  
NOT RELEASED TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCEV  
DATE 20 Jul 67

~~SECRET~~  
~~CONFIDENTIAL~~

Best Available Copy  
Available

~~SECRET~~

planning problems now facing the nation building process. We are beginning to speak more freely with GVN officials concerning the evidence that we have on corrupt officials. I believe that this policy will begin to show results shortly. GVN officials must recognize that the United States will not tolerate corruption and that their superiors cannot continue to ignore existing corruptive conditions. They must be made to understand that they can go only in one direction; i.e., begin cleaning their house of these practices just as soon as possible.

22. (U) In summary, I hope that this report gives a reasonably clear overview of the progress that has been made in II CTZ during the past two years, along with the contributions which have made this progress possible.

Best Available Copy

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG 1 FROCEV  
DATE 20 Jul 67

7

~~SECRET~~  
CONFIDENTIAL

# CONFIDENTIAL

## ANNEX A (INTELLIGENCE)

### 1. (C) General:

a. Effective intelligence and timely reaction to such intelligence are the keys to success in this war, just as in any war. There are several reasons why intelligence is perhaps even more significant in this type of environment than on a conventional battlefield:

(1) Since it takes two to make a fight, and since the enemy does not desire to fight US troops on our terms, it is necessary to locate and surprise him in order to achieve results.

(2) There is an ever-present 360-degree threat to each military unit in South Vietnam. With limited security forces available, accurate and timely intelligence (followed by aggressive use of such intelligence) is absolutely essential to avoid costly enemy sneak attacks from many directions.

(3) In this type of war against a relatively unsophisticated enemy, suitable targets for our modern weapons systems are difficult to develop. Only through a coordinated application of the very finest collection techniques can satisfactory targets be developed. Enemy field dispositions are unique and do not correspond to classic battlefield formations.

b. The selection of a G2 or S2 should be given the same careful consideration as the selection of a G3 or S3. Both are equally important to the commander and both efforts must work in complete harmony if effective results are to be obtained.

c. The intelligence business has become quite complex, although it should not be considered highly specialized. In time of war officers are needed who have combat arms backgrounds but who also have had some experience with the many facets of the intelligence system. The MI Branch needs to produce this type of individual so that he can hold key intelligence jobs in time of war.

d. The very grass roots nature of a counterinsurgency effort requires that intelligence operations be decentralized to the maximum extent possible. This should in no way interfere with the rapid flow upward and laterally of information. For example, the effectiveness of a rifle company would be vastly increased by the presence of a small intelligence element consisting of a company intelligence officer (Lieutenant), an enlisted analyst, and an interpreter. In other words, to exploit the many opportunities available at very low echelons, consideration should be given to the intelligence effort

DOWNGRADED AT 3 YEAR  
INTERVALS, DECLASSIFIED  
AFTER 12 YEAR . DOD DIR  
5200.10

A-1  
CONFIDENTIAL

8

Best Available Copy



# CONFIDENTIAL

## ANNEX A (INTELLIGENCE), Continued

beginning at company level rather than battalion level. The ROE's placed a Korean soldier trained in the Vietnamese language with each rifle platoon and found the results highly rewarding. This individual became, in effect, the platoon intelligence representative.

e. I would consider a G2/S2 at any level who dealt only in terms of enemy capabilities, of minimal assistance to the commander. While the classic list of enemy capabilities as taught in our service schools is essential, the commander in this type of war needs, in addition, the best estimate available of what the enemy is really up to. A commander will not be fully effective if he restricts himself only to a consideration of enemy capabilities, for the insurgent is capable of too many things at too many places at too many times. Intelligence officers should be taught to be keen estimators, particularly of enemy manpower and logistics systems.

f. The best tactical intelligence normally develops after a military unit has operated in an area for 30 to 60 days and the local inhabitants become confident that such military forces will remain in the area. At this point in time every citizen friendly to the government becomes a potential source of information and at this point the enemy finds it virtually impossible to move a major unit or to conduct reconnaissance without someone reporting it to friendly forces. Excellent examples of this occurred in BINH THUAN. Only after the 2/7 Cav was there beyond 30 days did a flow of intelligence begin to take shape from within the Province.

g. In Vietnam it is generally an exercise in futility to send a military unit on an operation of short duration to search a suspected area. The end product will normally be nothing but a group of tired soldiers. Either the unit must be left in the area for 20-30 days, or it must go in with definitive intelligence concerning the enemy: who he is, where he is located and his probable withdrawal routes.

## 2. (C) Intelligence Collection

a. General. There are now so many varied agencies and activities involved in the collection of intelligence information that each G2/S2 staff section requires and should have a collection manager to tie them together. No such individuals are authorized on tactical TOE's. This problem was overcome in IPFV staff by the utilization of the MI Detachment commander in a dual capacity as collection manager, although in the long run this detracted from his job as commander. On a long-term basis the Army should consider both intelligence collection and production activities in its TOE's at least down through brigade level where a single collection officer would suffice. Daily coordination by the G2 has been necessary with approximately twenty-five various sources

A-2

# CONFIDENTIAL

9

Best Available Copy

CONFIDENTIAL

ANNEX A (INTELLIGENCE), Continued

of information. The number is nearly the same at division level.

b. Aerial Reconnaissance: Aerial reconnaissance has become a major effort in the area of operations; however, the capabilities and limitations of the various forms of aerial reconnaissance in a countersurgency effort require identification. They are not competitive; instead, if properly utilized, they complement each other.

(1) Medium and High-Level Photography. This product is essential for study prior to operations in order to update basic map data. Comparative photography often indicates which areas the enemy is using, made obvious by new trails, new bunkers, or some other disturbance of the terrain. It is interesting to note, however, that during my tour in the II Corps Zone no enemy forces or means of transport were ever identified on medium or high-level photography. Better results should not be expected in a countersurgency environment against an elusive enemy.

(2) Visual Reconnaissance. This has proved to be one of the most productive of all the collection efforts, yielding daily indications of possible enemy activities in certain areas. Normally this effort consists of an O-1 aircraft with an Army or Air Force pilot plus a trained observer. At the present time approximately 25% of all VR missions result in positive friendly action of some type: artillery fire, TAC air, photography, ground patrol, or the employment of troops. For sheer cost-effectiveness, VR simply cannot be approached in a countersurgency.

(3) Infra-red. This has been an excellent indicator of enemy activity in remote areas which are known to be utilized solely by the enemy. It is of no value in areas populated by friendly personnel since it is impossible to distinguish between an enemy and friendly heat source. Red Wave returns by themselves rarely provide a sole basis for retaliatory action; however, these returns have been valuable in confirming or adding to information from other sources. Repetitive coverage is essential.

(4) Hand-Held Photography: This is a unique and very valuable source of information, once sufficient intelligence is available to direct the airborne platform to a small target area. This photography, normally taken from a helicopter or O-1 aircraft, preferably with a 500mm or 1000mm lens, has detected enemy presence which could not be detected on corresponding medium or high-level photography. In fact, one photograph taken in this manner with a 1000mm lens at 1500 ft actually showed a VC huddled in a foxhole. 35mm cameras with 500mm or 1000mm lenses are needed at brigade level. This potential source of aerial photography should be further tested.

A-3

CONFIDENTIAL

10

Best Available Copy

# CONFIDENTIAL

## ANNEX A (INTRODUCTION), Continued

(5) Camouflage detection photography. Once a possible enemy assembly or base area has been identified, this information can often be refined by the application of camouflage detection photography, which distinguishes dead or dying foliage from living foliage and thus indicates possible construction within forested areas.

(6) A number of worthwhile military targets were developed in the II Corps Zone, in remote areas, utilizing aerial reconnaissance, and little else, in a step-by-step sequence. For example:

(a) A general area was identified, generally through special agent reports.

(b) A detailed terrain study of the area was made utilizing both map data and aerial photography. About 50% of the general area could at once be eliminated as unsuitable for enemy use and attention could then be focused on the remaining 50%.

(c) Red Haze and camouflage detection photography were next used to refine possible enemy locations.

(d) Once highly suspected areas were identified, hand held photograph and VR missions were flown.

(e) The application of all of the above generally produced a target suitable for air, artillery, or ground attack. However, it often required as much as 30 days to develop a worthwhile target in a remote area, and sometimes the enemy moved during the period. Aerial reconnaissance must be paced in such a way that friendly intentions are not compromised. Thus, it is important that a steady pattern of aerial flights over an enemy target be maintained and that this pattern not be broken noticeably during the targeting phase.

### 3. (C) Intelligence Production

a. Basic principles of sound intelligence production apply in a counterinsurgency just as any other war environment. By its nature, however, an insurgency involves both overt and covert efforts to take over a government. It is not particularly difficult to determine the approximate strength of an overt enemy effort; however, it is extremely difficult to assess the number of enemy involved in a covert effort. Largely because of the clandestine nature of this particular war the estimative function has become of considerable importance in the intelligence effort. At corps and field army level an officer who displays talent in this direction should be designated an intelligence

A-4

# CONFIDENTIAL

Best Available Copy

# CONFIDENTIAL

## ANNEX A (INTELLIGENCE), Continued

estimator and as such should work closely with subordinate and higher headquarters to insure that statistics on the enemy are kept reasonably coordinated within the major commands.

b. Despite progress in the quality of intelligence products, the means of producing them at corps level remain antiquated. During the past year the most important intelligence document produced by JTFV staff, the weekly periodic intelligence report (PERINTREP), was published at various times by the Ditto process, by scanning, and by mimeograph, none of which proved to be satisfactory. This problem becomes more critical at each lower echelon. This problem needs to be attacked and significant improvements made.

### 4. (C) Counterintelligence:

a. The most dramatic successes against the infrastructure--although at low levels only--were during military operations when the police and local authorities moved into an area with US combat forces and seized those individuals suspected or known to be VC. It has been normal procedure in I Field Force to include elimination of the infrastructure as a military objective whenever operating in a populated area, listing it as a mission in planning directives and operations orders. This has made it incumbent upon the commander concerned to utilize all his resources to get the job done. It is a fact of life that until the infrastructure is broken up there will be no final victory in South Vietnam. Hamlet and village VC are particularly vulnerable to sweep operations since they normally are tied to their areas. VC district and province chiefs, however, move frequently and are rarely trapped.

b. In the type war we are experiencing in Vietnam, it is impossible to draw the traditional line of distinction between intelligence and counterintelligence. Often, the product of agencies engaged in counterintelligence is of more value to positive intelligence analysts and vice-versa. There appears to be a valid case for the merging of intelligence and counterintelligence efforts in a counterinsurgency environment. ||

### 5. (C) PW's and Detainees:

a. One of the first questions which needs to be resolved in a counterinsurgency is, who is a PW? When an enemy is identified as a member of an organized enemy military unit or when he is caught in a hostile act, there is no problem as to his classification. However, most guerrillas are not caught in a hostile act, nor are they caught in a military uniform or under arms. If they are not guerrillas, then what are they? This question had not been resolved at the time of Operation IRVING (and concurrent ARVN

A-5

# CONFIDENTIAL

12

Best Available Copy

# CONFIDENTIAL

ARMM A (INTELLIGENCE), Continued

and ROF operations) in BINH DINH Province 2 Oct-24 Oct 66. In these operations nearly 6000 detainees were apprehended, many of whom were full or part-time guerrillas. They were either released or charged as civil defendants since they did not fit the existing definition of a PW which required that an individual either be a member of a VC Main Force or NVA unit or that he be caught in a hostile act. This matter was subsequently resolved by HHCV and the JCS upon the recommendation of this headquarters and the definition was broadened to include all guerrillas as PWs. Many problems were avoided during later operations by this clarification. The point to be made is that in future counterinsurgency efforts, the question of what constitutes a PW must be resolved prior to military operations or untold problems will again be encountered. In my judgment it is essential to include guerrillas as PWs.

b. No organization and facilities existed within IITV, the Office of Civil Operations or within the CMI structure within the II CTZ, for the screening, handling, processing, and detention of large numbers of detainees for extended periods. These detainees required all manner of services during their screening and eventual classification into one of several categories. Screening camps in the II Corps Zone were established on a jack-leg basis, usually with the US tactical unit providing much of the assistance, and functioned only because the various parties concerned wanted them to function. Enormously complex screening centers were established at various times with no single individual in charge and, to the credit of the personnel involved, how they worked as well as they did remains a mystery to me. A possible solution to this problem might be for the Logistic Command supporting the Field Army to be staffed and equipped to move into division rear areas and provide the administrative services for such screening and detention centers. Tactical units are not equipped to do this nor are host countries who are in the under-developed category. It is totally unrealistic to expect US civilian agencies to perform this function, since they have no security personnel of their own and no major logistics systems behind them.

c. It was found that during initial interrogation many PWs who talked freely often gave incorrect information, which was only straightened out after three or four interrogations. A returnee (HOI CHANH) on the other hand, usually gave reliable information upon initial interrogation. Thus, at the time of initial interrogation a HOI CHANH as a rule was of considerably more value than a PW. It has been our experience, however, that most HOI CHANH's turn themselves in to district or province headquarters rather than to military organizations. Thus a problem existed of achieving rapid exploitation of HOI CHANH's by tactical military organizations which were generally not

A-6

# CONFIDENTIAL

13

Best Available Copy

CONFIDENTIAL

ANNEX A (INTELLIGENCE), Continued

in the immediate area. This problem has never been fully resolved in the VI Corps Zone. However, the Sector S2 and the S2 advisor have been used as the focal point and communications link among US, ROK, and ARVN intelligence officers and the National Police and GVN authorities.

A-7

CONFIDENTIAL

14

Best Available Copy

## STRATEGY

Best Available Copy

root out the infrastructure. Only then could effective pacification begin.

6. (C) CONCURRENT EFFORT

To complement the above strategy, many concurrent and important missions were accomplished to allow freedom of movement to the combat forces.

a. Interdiction of the Battle Field. The coast was interdicted by continuous US and Vietnamese swift boats and junk patrols. They were augmented by frequent search and destroy ops in known enemy base areas along the coast. Combat units conducted many aerial patrols both day and night. The mission of interdicting the Cambodian/Laotian border area was assigned to the 3/25th, the 4th Inf Div (-) and to 5th SFG assets. The I/II CTZ boundary areas still remain an unsolved problem. The terrain and availability of troops have allowed units to conduct only periodic interdiction missions along most of this boundary.

b. Airfield Construction. To accomodate bde and larger type ops, a C-130 capable airfield is required. Experience showed that it was feasible to conduct airmobile ops within a 40 km radius; therefore, an extensive airfield construction program was implemented to develop a network of airfields within 80 km of each other to allow ops to be conducted anywhere within the zone. This program is nearing completion with 36 C-130, 11 C-123, and 21 C7A active strips available as of 1 July. As a fringe benefit, we found that once an airfield was completed, the enemy moved away out of fear that US units could return without advance warning, thereby, in effect, denying the area to him.

c. Road Construction. To cut down the requirement for airlift, to provide for all-weather movement, to allow for armor and heavy artillery displacement, and to convince the enemy of our determination to penetrate his base areas, a massive road building and repair effort was initiated. Within the II CTZ we currently have 1650 km of roads in a green or amber status. In the west, many pioneer roads for fire bases were constructed close to the Cambodian border. These have proven to be a constant harassment to the enemy. Within populated areas, the construction of roads and bridges to support military operations provides the fringe benefit of laying the groundwork for pacification. It allows the people access to new markets and gives them the confidence that "with good roads military protection is always nearby".



~~SECRET~~

d. Security of Coastal Facilities. The ports, fighter airfields, and logistic facilities along the coast have been a minor drain on our combat power. Fortunately, the people are also concentrated on the coast; therefore, a good portion of them are given protection along with the facilities. The mission assignment of protecting coastal facilities which has been given to the ROKs has fitted in well with the overall strategy in II CTZ since the ROKs can give effective protection to the populated areas. They have had great success in applying the oriental approach, when dealing with and assisting the people.

e. Resources Control. The VC/NVA must rely on the people for part of their food. Government control of this resource takes place at the district level. The harvests are carefully protected and monitored. Excess rice is turned in to the district for storage and security, and each family is allowed only a few days of supply to be stored within its home. The VC also have extensive Agricultural Production units tasked with the mission of planting and harvesting rice and crops to supplement rations. The fields they plant are the target for our crop destruction program. We have come a long way in this area, but there is still much to be done to reduce the response time for securing approval for projects.

f. ARVN Operations. The ARVN combat strength varies from 22 to 30 bns in the II CTZ, including Ranger, JCR bns and two Cav Sqds. Much effort has been expended to improve their capabilities and potential. Until recent months, they have tended to operate near the roads, and seldom stay out on an op for more than five days. This, of course, has been due in part to their unsophisticated logistics system. In an effort to encourage them to develop more staying power we have tried two techniques: the long term concordant operations such as Op BYRD in PHAN THIET, and mutually supporting operations in which each force is assigned a separate AO. In both instances, when we support them with helicopters and artillery, it gives them much needed confidence. If they know that this support is allocated to them, or on call, they respond well. The increase in strength of the straight ARVN units from 16 inf bns to 23 inf bns since August 65 has also given them an added measure of confidence. Gradually, the ARVN cmdrs are proving to themselves that their units are capable of sustained ops and they are accepting the challenge to increase the length of time they participate in ops.

g. Sustained Operations. We have learned by experience that units can and should be committed to ops on a sustained basis. Long term employment offers two significant advantages: more mileage is

~~SECRET~~  
CONFIDENTIAL

Best Available Copy

~~SECRET~~

gotten out of the units without any ill effects, and it is easier to win the allegiance of the populace when it is assured of longer term presence of strong friendly forces in the area. The 1/101st Abn has stayed out of its base camp for over a year; the 3/25th Inf has never returned to its base camp; the 4th Inf Div stays out of its camp almost all the time; and the 1st Cav Div, except for one bn at a time, which is rotated into the base camp for security, has been out on ops since September 1966.

7. (S) CRITICAL CONSIDERATIONS

In retrospect, there are several areas which demand constant attention and are worthy of mention.

a. Cambodia. I have forwarded comments on this subject by separate correspondence. This sanctuary for a large NVA force is the biggest single challenge in all of II Corps. Such a military sanctuary, contiguous to the battlefield, in a supposedly neutral country, in effect ties up nearly one half of key US ground combat power in II CTZ, with no means in sight for us to destroy the enemy except when he decides on his terms when and where to fight on the Vietnam side of the border.

b. Helicopter Support. The geography of the area dictates a requirement for a large number of helicopters. We have been fairly successful in juggling resources for US forces, however, this is being done to the detriment of what I consider desirable sp for ARVN and ROK forces. Although it is relatively easy to concentrate assets for deliberately planned ops, unit commanders, to include ARVN and ROKs, must have helicopters readily available for reaction forces and to exploit successes. At present, ARVN commanders have not trained and worked with the helicopters enough to realize the full potential of its transporter. Not only does it allow units to operate for sustained periods of time, but it imbues a spirit of aggressiveness down to the small unit leaders.

c. Weather. We have learned several lessons about the weather. First, during the monsoon season we must rely heavily on the weather experts to establish the time of day best suited for the conduct of helicopter operations. Second, by careful planning and adopting a "can Do" attitude, ops can be conducted during the monsoon season, giving us the capability to whip the enemy under conditions which are supposed to favor him. Third, rain does not stop helicopter operations. Ground fog and turbulence can inhibit or prevent ops, but such conditions usually do not last for extended periods of time.

4

ANNEX B

~~SECRET~~  
CONFIDENTIAL

Best Available Copy

~~SECRET~~

d. Base Camps. After nearly two years experience it is obvious that US Army combat units can sustain themselves in the field on nearly a continuous basis, as evidenced by all separate combat commands in I FFORCEV. Fortunately, no base camps ever took on a permanent or advanced standard of construction. If we were to do it over again, I would strongly advocate holding camp construction to an absolute minimum. Our soldiers prefer not to return to camp. All the camps really need is a place for soldiers to secure their gear, and a shelter for a small portion of the units at a time to return to camp for rest and cleaning themselves.

8. (U) SUMMARY

The strategy of placing first priority on military ops against the VC/NVA main force units has proven to be the best course of action for II CTZ.

9. (C) STRATEGY FOR DEFEATING NVA - VC IN II CORPS

- a. Go after the NVA and VC hard core first.
- b. Only after they are defeated, or rendered ineffective can we begin true pacification.
- c. While S & D for NVA and hard core VC is in progress, secondary success occurs against local VC and infrastructure.
- d. Greatest success comes only after a strong unit effort has been made in an area over a long period of continuous operations, extending from 3 months to an indefinite length of time.
- e. Military support activities such as road repair, new bridges, protection of hamlets, all contribute to early signs of pacification and are the beginnings of RD.
- f. Link up of road nets to permit massive log support by road, is essential since insufficient air and helicopter support is available.
- g. A net of airfields capable of taking C-130's in all weather was developed to give us the capability of reaching the enemy anywhere in our zone.
- h. Offensive strategy must be credited for what military success has been enjoyed in II CTZ. The number of successful enemy attacks of battalion size or larger in II CTZ has been zero.

~~SECRET~~ 19  
CONFIDENTIAL

Best Available Copy

~~SECRET~~

The protection of hamlets and other population bases has proven successful by going after the enemy wherever we suspected him to be. To be sure, many dry holes resulted, but the fact that we were never caught off base and the fact that we were able to discover, upset, and demolish every major plan of attack by the enemy before it was executed, speaks well for this philosophy.

i. Working with ARVN forces presents many possibilities for effective mutual support.

(1) Concordant operations (Phan Thiet style)

(2) Mutually supporting operations (larger units (Bns) working in same area but separate AO's) - 1st Cav working with 22d ARVN Div.

j. Some form of assured and dependable US support must be rendered the ARVN units when on large operations. This support must either be on ground working with the ARVN, or ready to jump in if called for.

k. Artillery support is vital. The infantry must position itself against the enemy so that the artillery can fire effectively on the enemy with minimum danger to friendly troops.

l. A combat unit can always deliver more in combat than it usually thinks it can.

m. The combat potential of ARVN units is great. When challenged, the ARVN has proven this time and again. The US commanders working with the ARVN must keep this in mind in order to get the most mileage out of their relatively untrained units.

~~SECRET~~

CONFIDENTIAL

Best Available Copy

# ARTILLERY

## 1. (c) ORGANIZATION AND OPERATIONS

a. In the fall of 1965 the non-divisional force artillery consisted of two heavy battalions, one medium battalion and two light battalions plus a searchlight battery. The Headquarters and Headquarters Battery, I Field Force Vietnam Artillery arrived in Vietnam at reduced strength on 14 November 1965. Initial deployment of non-divisional artillery units was primarily in attached or OPCON status to U. S. divisions and brigades. This additional artillery was required by the maneuver elements for support of base defense and LOC operations. At the same time close and continuous fire support was required for far-ranging air mobile forces. Attachment was further dictated by the fact that until the arrival of the 52d Artillery Group and expansion of Headquarters, I Field Force Vietnam Artillery into a full TOE Corps Artillery Headquarters and Headquarters Battery in the Summer and Fall of 1966, Force Artillery lacked the resources to exercise effective centralized control of the units spread at widely separated locations in II CTZ.

b. Artillery operations during the initial build-up of U. S. Forces were characterized by employment by battery, wide-spread emplacement, and use of available artillery in essentially a battery level direct support role. Established artillery doctrine proved valid in the counterinsurgency environment with organic division artillery furnishing close and continuous fire support for maneuver elements while Force Artillery reinforced division fires and provided depth to combat. During this period the small amount of available artillery was shifted rapidly throughout the II CTZ - moving by air, sea and land. Air mobile operations were developed to a high degree, including routine displacement of 155mm howitzer elements utilizing the CH-54 helicopter. Another innovation was the development of the composite 8 inch/175mm batteries consisting of two 8" howitzers and two 175mm guns per battery. This organization combined the long range coverage of the 175mm gun with the proven efficiency and reliability of the 8" howitzer, allowing for flexibility of employment and conservation of the short lived 175mm tubes. The 175mm gun has proven invaluable as a supporting weapon to provide coverage of vast land areas.

c. The survey, meteorological and counter mortar/battery capabilities which Department of the Army recently has provided have enhanced greatly the accuracy, timeliness and effectiveness of the fires of the artillery with I FFOCEV.

## 2. (S) NEW IMPROVEMENTS REQUIRED

a. The increasing availability of I FFOCEV Artillery makes it essential that this means of fire support be exploited to its maximum capability for the destruction of enemy forces whenever and wherever they may be found. Inherent to this exploitation of artillery fire support is the requirement for rapid displacement of artillery to mass fires, the timely delivery of accurate artillery fires without adjustment and the close and continuous support of all US/ARVN/FRMAF elements in II CTZ. Increased centralized control of I FFOCEV Artillery by the Artillery Commander, and the Artillery group commanders, has increased the flexibility of employment necessary to exploit

SPECIAL HANDLING REQUIRED

ANNEX C - 1

GROUP-4

NOT RELEASED TO FOREIGN NATIONALS

BY AUTHORITY OF CG I FFOCEV

DATE 30 JUN 67

Downgraded at 3 Year Intervals  
Declassified After 12 Years

CD Rep'd by 1 of 1 Cys. CD 902: 43865

Best Available Copy

~~SECRET~~

fully the artillery fire support capability; however, continuing attention must be directed toward insuring that all artillery means are utilized fully and employed gainfully. These increased resources must not be permitted to become static in employment or to be committed to prolonged and unproductive II and I programs. Senior commanders have been alerted to watch for development of profitable targets for artillery, both within and without assigned tactical areas of responsibility and areas of operations, and to the temporary displacement and employment of I FFORCEV Artillery to mass fires against such targets. These temporary displacements requiring I FFORCEV Artillery to be moved outside of assigned tactical areas of responsibility and areas of operation, must be coordinated fully between the senior commanders concerned and the Artillery Commander. This program will allow improved fire support throughout the II CTZ and serve to restrict future enemy freedom of maneuver and deny him sanctuary.

b. Even though the 175mm gun has proven highly effective in this type of conflict, the short tube life of 300-400 rounds constitutes a serious design deficiency which should be investigated thoroughly by Department of the Army and corrected as soon as possible.

c. Two other organizational improvements are required to improve the combat employment of artillery. The Department of the Army directed deletion of organic aviation sections from the TOEs of artillery battalions and control headquarters has resulted in a serious degradation of command and control, of artillery target acquisition and of fire control capability. Moreover, the requirement for aerial resupply of units, inaccessible by land lines of communication, indicates that an organic light-cargo heli-lift capability is necessary at battalion level. The restoration of the TOE aircraft to the artillery with I FFORCEV should be considered as a matter of urgency.

d. An additional TOE improvement by increasing the number of authorized fire direction center personnel is required in the firing batteries of non-divisional artillery units. These batteries routinely are separated from their parent battalions and must maintain their own 24 hour fire direction operation. Current battery TOEs do not provide for adequate personnel to support, either quantitatively or qualitatively, these continuous fire direction operations.

e. The 8 Inch and 155mm units have been directed by the Department of the Army to maintain proficiency in the handling, check-out and firing of special weapons. Such units have not, however, been provided with the required trainers, publications or tools with which to accomplish such training. A partial solution has been found in a quarterly special weapons course which is taught out-of-country. A better and more realistic solution would be to provide special weapons assembly teams as well as the weapons and related impedimenta from out of country for such units if a decision is made to employ special weapons.

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCEV  
DATE 30 Jul 67

ANNEX C - 2

22

GROUP-4

Downgraded at 3 Year Intervals  
Declassified After 12 Years

~~SECRET~~

CONFIDENTIAL

Best Available Copy

# CONFIDENTIAL

## TACTICAL AIR SUPPORT

1. (C) GENERAL: The basic strategy of I PFORCEV has been to keep pressure on the enemy through ever increasing offensive operations. The use of TAC Air and B-52 strikes have aided in maintaining the high degree of mobility and flexibility required to meet the constantly changing tactical situation.

2. (U) DIRECT AIR SUPPORT CENTER (DASC): In September 1965 a separate DASC was established to provide Task Force ALPHA with the best possible response to requests for tactical air support. By co-locating a DASC with Task Force ALPHA HQs, coordination and control of tactical air support throughout the task force area of responsibility was greatly facilitated. Priorities of air support could be shifted quickly to meet the ground force commanders requirements.

3. (C) TACTICAL AIR CONTROL SYSTEM: Tactical air support has been provided on a timely and accurate basis. The requirement for political clearance has on occasion delayed the response time in providing immediate air support. Close air support during inclement weather and hours of darkness has been made possible by the development of MSQ-77 Combat Sky-spot System. The only limiting factors are being those imposed by the system itself, however, it has proven to be effective and has accounted for approximately 31 per cent of all tactical air missions flown during the first six months of 1967.

4. (C) AC-47 (SPOOKY): The introduction of the AC-47 aircraft equipped with its miniguns and flares has aided in the security of outlying units at night. The AC-47 has on numerous occasions aided the ground commander in the accomplishment of his mission during the hours of darkness. Due to the limited number of these aircraft they have been utilized only in an immediate response role and as available for preplanned operations.

5. (C) TACTICAL AIRLIFT: The requirement for immediate response to cope with the changing situation has to a large extent been satisfied by the capability of air lifting large numbers of troops and large amounts of supplies. In order to accomplish this 39 airfields capable of C-130 operations and 19 capable of C-123 operations have been constructed in the II Corps Tactical Zone.

6. (C) B-52 STRIKES: One of the most outstanding features of the last eighteen months has been the increasing tempo of the B-52 strikes flown in the II Corps Tactical Zone. This is reflected by the fact that more missions were flown in the first six months of 1967 than were flown in the entire year of 1966. With the stationing of the B-52's in Thailand

even more strikes will be available due to the shorter turn around time required. PW interrogations consistently reveal that the one thing feared most by the enemy is the P-52 and since it utilizes its capability of bombing from high altitudes at a high rate of speed its bombs are exploding prior to the time it is seen or heard.

7. (C) CHEMICAL AIR OPERATIONS: Chemical defoliation missions have developed very significantly over the past few months. These missions aid in the reduction of the enemy's capability to produce his own food as well as to deny concealment thereby forcing him to move or run the risk of being observed and fired on by all means available to the ground commander.

8. (C) PSYCHOLOGICAL OPERATIONS SUPPORT: It is impossible to determine the exact relationship between the number of leaflet and loud-speaker missions flown in psychological warfare and the number of returnees (Chieu Hoi). However, it is evident the psychological operations have been a tremendous factor in the successful Hoi Chanh program since the Hoi Chanh passes dropped are being utilized by the returnees and questioning of returnees indicate they were influenced by the program.

9. (C) TACTICAL AIR RECONNAISSANCE: Tactical air reconnaissance has provided valuable intelligence in support of ground operations and the Air Interdiction Program. More work needs to be done by the USAF to assist the tactical units in the field and provide a more rapid response to the ground commanders needs. More coordination is also required to insure that the Army's own organic reconnaissance capability compliments and does not exclude the use of the USAF TAR capabilities.

10. (C) AIR INTERDICTION: During 1967 the use of concentrated tactical air against an NVA Division and a Regimental HQs forced them to move. This program was used following a B-52 strike in an economy of forces role. Air interdiction operations were carried out against other enemy regimental and battalion concentrations forcing them to move and disrupting their plans. This type of operation was the first occasion known in Vietnam where full Tactical Air Interdiction Programs have been carried out against enemy forces of this size.

11. (C) The enemy's fear of air strikes, and the general effectiveness of TAC support during day and night operations have made significant contributions to the success of I FFORSEV operations. Adequate and timely air support has been increased to meet the increased tempo of ground operations in II Corps area and the use of air has been limited only by imagination of its users in the employment of available resources.



~~SECRET~~

ROLE AS SENIOR II CORPS ADVISOR

1. (U) As the senior advisor to CG, II Corps, I have found that the relationships involved must be guided by certain fundamentals. There is no doubt that the most effective relationship between advisor and commander is built upon a keystone of mutual trust and confidence. The traditional, forthright manner which has become known as the American way of doing business has to be religiously practiced in the role of Senior Advisor. Both commanders must appreciate that mutual dependence is a signum of success against the enemy.
2. (U) The Corps Commander's dual role of political boss and military commander and all of its attendant responsibilities must be understood and appreciated by the senior advisor. A concentration of political and military responsibilities rests squarely on the Corps Commander's shoulders. To win, he must have the politician's sensitivity of survival as well as the military commander's decisiveness. The senior advisor's awareness of the complex nature of his counterpart's job calls for him to be judicious in the application of pressure in pursuit of military goals. Selection of the most important military objectives for ARVN/US operations in conjunction with making the request at the proper time is essential. Constant pressure on many small points only causes loss of impact on gaining support for major issues. As senior advisor, I had to make constant evaluation of those things for which I desired the Corps Commander's support and then concentrate on those matters.
3. (U) Frequent personal visits on an informal basis got most problems resolved. These visits should be made on an average of once a week by the senior advisor. On the more important issues, especially if face saving is a concern, the meetings should be private and advice should be given diplomatically.
4. (U) Once an agreement is reached, the Senior Advisor's word must be kept. This is particularly true when support has been promised. An effective Senior Advisor/Corps Commander relationship survives on trust. Once the Corps Commander is convinced that we are honest, sincere, and are working for his victories, the Senior Advisor can be as tough and positive as he desires in his observations, criticisms, and recommendations.
5. (U) Psychologically, it makes good sense to compliment the Corps Commander promptly on good work by his units. He can pass it on down the line as he sees fit. Concurrently, US military accomplishments must be tipped to bring the ARVN into the limelight wherever possible. Building up ARVN's prestige is basic to our mission.

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS 1  
BY AUTHORITY OF CG I FFORCEV  
DATE 30 Jul 67

Downgraded at 3 year intervals.  
Declassified after 12 years.

ANNEX E

~~CONFIDENTIAL~~  
~~SECRET~~ 25

CDC Repro by 1 of 1 by <sub>12/15</sub> CDCW: 43865

Best Available Co

~~SECRET~~

6. (C) On the matter of coordinating US/ARVN operations, US Troops and AO's must be made as large as possible to give the US units as much freedom of action as possible. Such large areas will minimize the amount of coordination that must be made with the II Corps staff. In turn, this minimizes the causes for compromise of planned operations. Experience has shown that anything told to the II Corps Staff will, as often as not, be delivered to the VC within 24 hours. ARVN officials recognize this weakness and are concerned about informers in high places.

7. (S) The II Corps Commander recognizes the importance of coordinating his military efforts into those of IFFV and ROKFV. When only military considerations have been involved we have experienced almost complete cooperation and willingness from II Corps to follow the advice given. Where there has been unwillingness to agree on recommended actions it is usually based on factors involving General Vinh Loc's political hat. For instance, he has never consented to moving the ARVN battalion at Chco Rco to a more productive area of operation. He feels strongly that an ARVN battalion must be kept in Phu Bon Province because of the strong Montagnard population there and the fear that FULRO activity might otherwise get out of hand.

8. (C) The Deputy Senior Advisor and his staff, located in the II Corps Headquarters, serve as both the day to day advisory effort and the long range planning advisors. Basic guidance stems from CG, IFFV. On an average of once a week I have made a point of personally meeting with Gen Vinh Loc. The Deputy SA is usually the only other person present. At these meetings we discuss the whole range of problem areas, as well as current and future operations. This arrangement has worked well for more than one year.

9. (C) Whenever a point must be stressed my practice has been to write a letter on the subject to General Vinh Loc. It serves two purposes: one, to emphasize the importance of the subject and, two, for language reasons to make certain that he has an opportunity to study what I have said, as opposed to a possible misunderstanding from an oral emphasis.

10. (C) In summary, I have found General Vinh Loc to be cooperative and responsive to recommendations. Good relationships stem from the normal rules of practicing good manners, being honest and forthright in giving advice, and in living up to promises.

SPECIAL HANDLING REQUIRED 2  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCEV ANNEX E  
DATE 30 Jul 67

~~SECRET~~  
CONFIDENTIAL

Best Available Copy

26

# CONFIDENTIAL

## RELATIONS WITH ROKFV

1. (U) In accordance with the provisions set forth in the Military Working Agreement, signed by COMROKRV and COMUSMACV in September 1965, ROK Forces in Vietnam are under the command of the Commander, Republic of Korea Forces, Vietnam, and as such are not under the OPCON of CG, I FFORCEV. Planning and operational coordination with ROKFV FC has been accomplished primarily through three special liaison groups (ROKRV FC, Capital ROK Inf Div, 9th ROK Inf Div), by visits of commanders and staffs, and through the medium of a combined campaign plan which is developed and concurred in by the three headquarters of the national forces within II CTZ.

2. (U) Coordination with ROKFV FC is facilitated by the fact that it has its headquarters located in the city of Nha Trang with Headquarters, I FFORCEV.

3. (C) US Forces support ROK forces with helicopters, additional artillery, communications, engineer support and psychological warfare.

4. (C) ROK forces have a TAOR extending from the Mui Ba Mountain, north of Qui Nhon, along the populated areas of the coast to Phan Rang. This TAOR protects over 90 per cent of the population living along the coast between the northern and southern limits of the TAOR. ROKFV FC also has an AO to the west of the TAOR for which they are responsible and into which they conduct operations, primarily against the 95th NVA Regiment and 18B Regiment.

27

Downgraded at 3 year intervals.  
Declassified after 12 years.

ANNEX F

CONFIDENTIAL

Best Available Copy

**CONFIDENTIAL**  
**CIVIL AFFAIRS**

1. (U) CIVIC ACTION: US/FMNAF civic action programs in II Corps Tactical Zone have progressed to the point where they now make a major contribution to the overall Revolutionary Development Program. Civic action is still gaining momentum with increasing activities reported each month. A considerable portion of this activity is in direct support of the RD programs, such as providing transportation for materials for self help project, organization of youth and sports activities and assistance to refugees, schools and hospitals. While RVNAF participation has in the past been spotty, efforts by US/FMNAF to integrate RVNAF in civic action programs have shown remarkable success. Improvement can be expected to continue.

2. (U) CIVIL AFFAIRS AREA CONCEPT: On 16 April 1967, I FFORCEV implemented the area concept of employing the CA teams of the 41st CA Company. This concept envisions the assignment of area responsibility to the CA teams, rather than attaching them to tactical units. These teams support the tactical operations in their area of responsibility. Additionally, in coordination with province/district Advisors, they plan and organize civic action in areas uncovered by military operations, but in which RD efforts have not yet been undertaken. Their efforts are primarily aimed at RVNAF participation.

3. (U) COMMUNITY RELATIONS: Community relations Committees have been established in each province in II CTZ and in the nine major urban areas of US/FMNAF concentration. Community Relations Committees act under the supervision of the designated installation coordinator and serve as a means of coordinating military/civilian efforts to reduce the impact of these forces on the Vietnamese social structure. These committees have been eminently successful in improving relations with Vietnamese community, increasing civic action efforts and decreasing the inflationary trend of the local economy.

4. (C) REFUGEES: The handling of refugees has been accomplished generally in a satisfactory manner and with the maximum cooperation of all agencies involved. On many occasions tactical units have been required to render assistance by moving refugees to resettlement areas and helping in the organization of these areas. Increased tactical operations in populated areas and the desire of Vietnamese to flee VC dominance, caused a considerable increase in the amount of refugees. Resettlement to new areas, returning people to their homes and permanent settlement near employment sources have kept the number of persons in temporary camps to the minimum. Of the over 600,000 persons that have been classified as refugees, only 93,500 are currently in temporary camps. Now emphasis is being given to improve the living standards of those in temporary camps and to provide permanent homes to these people.

**CONFIDENTIAL** 28

Best Available Copy

## CONFIDENTIAL

5. (C) RESOURCES CONTROL: The control of the two most important resources, rice and salt, has been significantly improved during the past year. Approximately one year ago, GVN controlled approximately 76% of the rice production with 24% being controlled by the VC. Currently, it is estimated that 93% of the rice production is controlled by GVN and 7% controlled by the VC. One year ago 15% of the salt production was under GVN control. Because of tactical operations in Binh Dinh and Phu Yen Provinces, during the past year, 95% of the salt production is now considered under GVN control. Increased mobile check points and use of PFF forces in conjunction with military operations have improved the overall program measurably. The improvement in this vital area has had a telling effect on the operations of the enemy.

CONFIDENTIAL

Best Available Cop.

# CONFIDENTIAL

## REVOLUTIONARY DEVELOPMENT SUPPORT

### 1. (U) GENERAL:

a. Keying to the shift of emphasis within ARVN from pure military operations to revolutionary development, a Revolutionary Development Support Division (RDSD) was organized under the Assistant Chief of Staff, G3, in August 1966. Organizationally, RDSD absorbed the G5 assets and responsibilities.

b. On 1 July 1967, the RDSD Section officially became part of the new CORDS organization, although integration had begun as early as 16 June 1967. It is too soon to make any sound evaluation of the military/civilian staff integration. However, if one puts aside the "growing pains" normally associated with an effort of this complexity, visible progress is being made by CORDS to centralize the revolutionary development support activities in the II Corps Tactical Zone. The integration of civilian and military operations at province and district level is also underway with a minimum of lost motion. An early assessment is that the new CORDS organization has added vigor and given a new sense of urgency to the support aspects of revolutionary development. Project "Take Off," Ambassador Komer's plan to get CORDS on the offensive, is in the initial stages of implementation as I leave. Particulars of this program will be spelled out below.

### 2. (C) MILITARY SUPPORT OF REVOLUTIONARY DEVELOPMENT:

a. After reviewing I FFORCEV operations over the past several years, a visible pattern of success has been brought into focus. Experience in the highlands and coastal provinces of Binh Dinh, Phu Yen, and Binh Thuan have shown that US forces are particularly well equipped to fight NVA and hard core VC units. Engaging these larger and better equipped enemy units and inflicting heavy casualties has resulted in a general breakdown of the NVA/VC forces' ability to mount large scale attacks. When this capability is denied the enemy, the resulting improvement in security and consequent weakening of local VC infrastructure gives us a favorable environment for introducing RD teams. Once RD teams are implaced along with RF and PF elements which provide local security to the RD teams, full scale revolutionary development activities can safely follow. These include, but are not limited to: psychological warfare operations, police operations, refugee programs, self-help projects, census/grievance operations, hamlet elections, medical assistance, and establishment of schools. For these programs to weave the tight fabric of good government, we have found that the best results have been obtained

## CONFIDENTIAL

where, in addition to the local security provided by RF/PF, US units have operated on a continuing basis.

b. Over the past year, we have found ourselves in the curious position of seeing the success of our military operations out-strip GVN's ability to follow through with revolutionary development programs. This has been particularly true in Binh Dinh Province where Free World Forces opened up a vast area that was formerly controlled by the VC. Faced with a situation where there were insufficient RD teams trained to place in the recently uncovered areas, the province chief organized and trained 12 military/civil teams on an emergency basis for deployment in Phu My Valley. These teams are made up from provincial resources and are expected to "hold the line" until a more formalized RD effort can be established in the area. At this point, the military/civil team concept appears to have been more successful than originally forecast. The extent of their success is summed up by the opinion of some GVN officials and US advisors that the military/civil teams appear to be more effective than many Vung Tau trained RD teams. Enthusiasm for utilizing similar teams, such as the administrative teams in Phu Yen and the Family and Quarter Zone teams in Binh Thuan, have provided a new and effective means for making up for the short fall of Vung Tau trained RD Cadres.

c. In Binh Thuan Province, the I FFORCEV pilot RD project, Operation HOP LUC has progressed satisfactorily. This operation has proven the maxim that adequate security is the key to the RD Program. In HOP LUC, a US battalion has been in direct support of an RD area for over eleven months with outstanding results. Since HOP LUC was initiated, an additional 100,000 people have been declared as living in secured areas. There have been 55 kilometers of highway and 12 kilometers of railroad opened by these operations. There has also been a significant increase in the number of returnees under the Chieu Hoi Program. As a comparison, in 1966, a total of 324 returned. During the first seven months of 1967, 717 Hoi Chanhs have come in. In addition, there has been a significant drop in VC initiated incidents in the province. The standout lesson is that the people will respond to GVN control if given adequate security.

d. As the main VC and NVA forces are eliminated, I foresee a shift in emphasis from large scale military battles to operations in direct support of Revolutionary Development. Operation HOP LUC in Binh Thuan has proven that US battalions in direct support of Revolutionary Development can do the job.

3. (U) CORDS OFFENSIVE: To inaugurate the new CORDS organization, Project "Take Off" was conceived to put CORDS on the offensive. "Take Off"

## CONFIDENTIAL

is an effort to focus on and functionalize the work on revolutionary development support in eight key areas. Prior to the announcement of Project "Take Off" by Ambassador Komer, the II Corps CORDS staff set in motion similar programs, the major ones of which were to improve the Chieu Hoi program and establish an effective system to eliminate the VC infrastructure. This prior work had prepared the way for Project "Take Off." While it is too early to make any evaluation of CORDS progress, the general feeling in the new organization is one of urgency and optimism. As more and more resources are diverted to CORDS and more energy exerted to implement priority programs, I feel that the revolutionary development support aspects of our effort in Vietnam will gain the necessary momentum.

Best Available Copy

3

ANNEX H

3.2

CONFIDENTIAL



# CONFIDENTIAL

## SIGNAL

1. (C) The II Corps Tactical Zone is characterized by extremely rugged terrain, long distances between I FFORSEV HQ's and its major OPCON units and extremely limited highway systems. The terrain features that are desirable from a communications point of view are usually remote, seldom accessible by road and seldom secure. Tactical operations cannot wait for hill tops to be cleared and prepared for use as communications sites. Nor can any significant amount of combatant resources be spared from their primary mission in order to secure remote sites. As a result, locations that are unsatisfactory from a radio propagation view point but which can provide security must be occupied hurriedly. The secondary result is marginally satisfactory communications. These conditions cannot be remedied readily. Therefore communications equipment possessing the necessary characteristics and capabilities to overcome the conditions must be provided. Specifically, characteristics of air transportability to allow rapid location and relocation, and wave propagation to avoid the necessity of installing relays at isolated locations are essential. Tactical tropospheric scatter multi channel equipment is suggested.

2. (C) There are more plentiful communications in Vietnam and greater dependence on those communications than ever before in military history. However, there is no apparent progress toward providing secure voice communications. The heavy employment of radio as a means of voice communications makes the allied forces particularly vulnerable to enemy intelligence efforts. There is an urgent requirement for light weight, small, voice security devices.

ANNEX I

CONFIDENTIAL 30 Jul 67  
NOT AUTOMATICALLY DECLASSIFIED  
DOD DIR. 5200.10

CONFIDENTIAL 33

Best Available Copy

UNCLASSIFIED  
HELICOPTERS

1. The use of helicopters in the II Corps Tactical Zone (CTZ) has provided valuable tactical lessons applicable in counterinsurgency environments. Many littoral nations which resemble the III Corps segment of the RVN could be possible targets for insurgency actions. It can be expected that insurgency tactics will develop along the same lines as those employed in the II CTZ (Inclosure #1).

2. Enemy bases have normally been located in mountains and other areas of limited communication means from which NVA and VC forces controlled population centers and/or attacked military bases. Employment of the helicopter to get to these bases has been proven in II CTZ operations to be the key to successful counter insurgency operations.

3. Experience of the French in their unsuccessful campaign against the Viet-Minh in Indo-China need not be repeated in US supported counterinsurgencies. With relatively few tactical maneuver and support forces, and rather austere helicopter resources, operations in II CTZ have been successful in gaining access to enemy base areas, attacking his main force units at many points simultaneously, weakening his pressure on the infrastructure, preventing his making strong sustained attacks against friendly base areas and stymieing his efforts to conduct well coordinated main force-local force operations against LOCs connecting major friendly held base areas.

4. To date we have never enjoyed an abundance of helicopters to meet our requirements. In recognition of this shortage any tendency to fritter away helicopter resources in the defense of base areas, protection of LOCs, and in administrative and logistics support roles must be avoided. Since enemy main force units must be eliminated before meaningful successes in revolutionary development and nation building can be achieved, it follows that the highest priority for the use of available helicopters should be given to the support of tactical maneuver against the main forces and the base areas which support them. Application of this principle in II CTZ has been successful in denying the enemy the sanctuary of key base areas in the zone, kept him beaten down and on the run and, of equal importance, denied him the capability he so ably used against the French of piecemeal seizure of the friendly base areas and destruction of friendly maneuver forces. Successes gained in this way have had the added effect of reducing the requirement for using tactical forces for security of base areas and LOCs and freeing them for increased use in offensive operations against the enemy forces.

UNCLASSIFIED

24  
Best Available Copy

## UNCLASSIFIED

5. It was early recognized that the wide expanse of II CTZ and the dispersion of maneuver forces necessary to keep pressure on the enemy main forces made it impractical to centrally locate all helicopter units. It is necessary not only to locate them in the coveral base areas where maneuver forces are located but to be able to move them with maneuver forces to tactical operating bases (Incl 1) from which heliborne forces can be deployed for operations against enemy main force units and base areas. This not only enhances the rapidity of response to enemy targets but conserves flying hours which can be used for exerting greater offensive pressure on the enemy. Otherwise these hours would be used in daily flying to and from the central location. For the same reason, daily movement of helicopter units over great distances from one area to reinforce operations in another, commonly known as "yo-yoing" units, should be avoided. Successful avoidance of daily "yo-yoing", however, requires that a larger ratio of helicopter units to maneuver units be made available in a large tactical zone where the centralization of helicopter units is not practical. The larger ratio is required to insure that the tactical commander in each area has sufficient support to handle foreseeable peak operational requirements consistent with the enemy threat in his area. While utilization can be expected to lag during periods of lesser activity it should not be of overriding importance in the allocation of helicopters between supported forces. As an added note on the allocation of helicopter resources, an even higher helicopter to maneuver force ratio is required for support of force operating in highland areas to compensate for higher altitude which ranges up to 3,000 feet higher than coastal areas in II CTZ and restricts the load carrying capacity by as much as 50%.

6. In a large geographical expanse, such as RVN, it is essential that the control of helicopter units be decentralized to the level consistent with responsibility for achievement of campaign objectives in the various tactical zones. The multiplicity of enemy threats existing throughout the CTZ, the scarcity of helicopter units and the ever present requirement to meet tactical emergencies, indicate that operational control of non-divisional helicopter units should be retained by the senior commander in the tactical zone. By retaining operational control and allocating units to the direct support of the various major maneuver units, the senior tactical commander retains the flexibility to shift and mass helicopter resources to rapidly meet emergencies throughout the zone, capitalize on targets of opportunity and achieve scheduled campaign objectives.

7. Turning again to the necessity for maximizing the use of available helicopters in support of tactical operations, much can be achieved toward this end through the building of roads and

UNCLASSIFIED

airfields, by which surface and air movement of tactical forces and their logistic support can be achieved. While the helicopter is said to free our forces of dependence on roads which can be easily interdicted by local force units and guerrillas, it should be understood that failure to build and use roads into major tactical areas fosters an increasing requirement for administrative movement of tactical forces and their logistical support with a consequent reduction in helicopter availability for tactical deployment of those forces. The combined building and upgrading of nearly 2,000 kilometers of roads in II CTZ has contributed substantially to the reduction of helicopter blade time required for administrative troop and logistic movements.

8. The use of helicopters in the II CTZ campaigns has increased, rather than decreased, our dependence on Air Force transport of tactical forces and their logistical support. The building of C-130 capable strips, every 80 kilometers in the zone, totalling 40 in all, has brought enemy bases in even the most rugged and otherwise inaccessible areas within efficient reach of helicopter assault. Air Force transport of maneuver forces into the tactical operations base which encompasses each strip, saves helicopter blade time which can be used to increase the tempo of air assault operations against the enemy rather than for long multiple lifts which would otherwise be needed to transport the troops to the tactical area of operations. This is not to deny that there will be situations from time to time in which it will be desirable to mass helicopter assets for a rapid surprise assault on a distant enemy unit or base area. Unless the tactical operations base is in proximity to the normal location of the supporting helicopter units, extended duration operations will require movement of helicopter maintenance bases to the tactical operations base. This practice in II CTZ, encompassing more than 25 company moves in which the maintenance base displaced during the past year, has resulted in substantial savings in rotor time which were used to increase tactical pressure on the enemy. Prompt movement of the maintenance base is essential to avoid dead-heading long distances for maintenance of the helicopters. The helicopter units, therefore, should have the same capability to move by Air Force aircraft as the maneuver units they support. Experience with one assault helicopter company in II CTZ which has the capability of moving its maintenance base by Air Force aircraft and CHINOOK helicopter indicates that equipping all assault helicopter companies with the necessary light weight maintenance shelters and supply containers would greatly improve their capability to provide prompt, sustained support from any of the tactical operations bases in II CTZ. It follows that helicopter units must be prepared to live and operate for extended periods away from their normal base camp areas, a practice which has become commonplace in II CTZ.

UNCLASSIFIED

ANNEX J

26  
36 Best Available Copy

UNCLASSIFIED

9. Because helicopters enable friendly forces to keep the pressure on enemy forces, intensive efforts by the enemy to destroy helicopters in their base areas must be expected. It is imperative, therefore, that security against ground penetration and rocket or mortar attack on base areas be provided as soon as possible. Permanent base heliports must have, for each aircraft, revetments which provide maximum protection. In tactical operating bases, hasty revetments must be erected as a matter of high priority and improved to provide maximum protection to the aircraft as fast as possible.

10. In summary, experience indicates that the helicopter, more than any other tactical weapon, has enabled US/FMNAF/ARVN forces in II CTZ to defeat the enemy strategy and tactics which he used so effectively in defeating the French forces in Indo-China. Experience in the employment of heliborne forces in II CTZ can be applied to counterinsurgency environments found in the littoral nations of Latin America and Africa. Because helicopter resources can be expected to be scarce in the initial stages of a counterinsurgency campaign, it is essential that these resources be used to the maximum extent possible for support of tactical operations against enemy main forces and base areas. The application of certain principles which have evolved from experience in II CTZ will enhance the achievement of increased tactical effectiveness in the employment of helicopters. Among these are:

a. Helicopter units must be located in the base areas of maneuver forces they support.

b. Helicopter units should have the same capability to move by air as the units they support. To achieve this capability they must be provided air mobile maintenance equipment.

c. To compensate for widely dispersed location of forces and for the effects of density altitude in mountainous areas, higher helicopter to maneuver force ratios are required.

d. Building and use of roads must be increased to reduce the use of helicopters in administrative movement of troops and logistic support.

4

ANNEX J

UNCLASSIFIED

27  
37

Best Available Co

UNCLASSIFIED

e. Building and use of C-130 capable airfields provides the capability to reach enemy base areas more efficiently by heli-borne assault.

f. Operational control of non-divisional aviation units should be vested in the senior commander in the tactical zone.

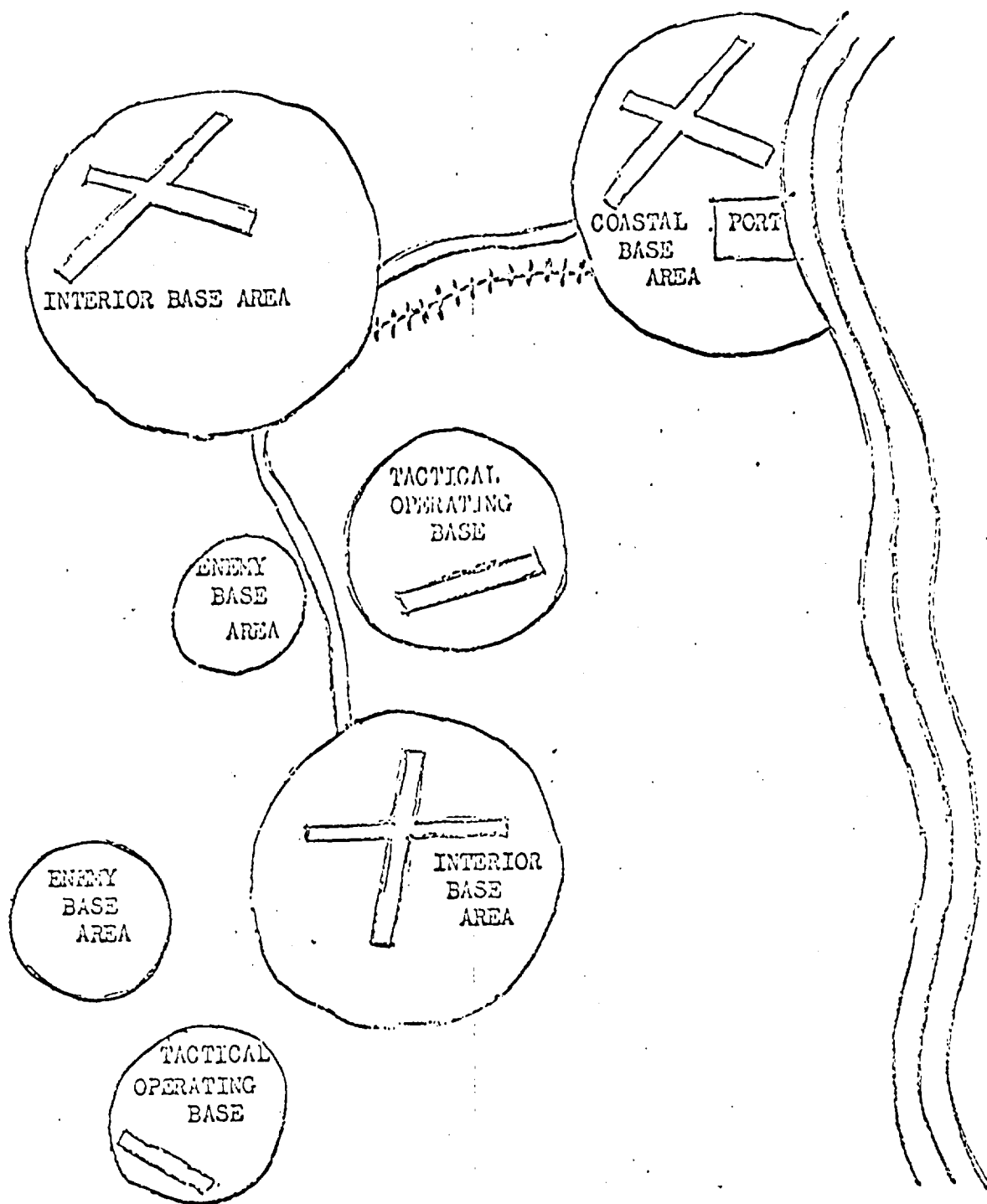
g. The revetment of helicopters should be given a high priority in base camp areas as well as in tactical field locations.

1 Incl  
Tactical Schematic drawing,  
Counterinsurgency

UNCLASSIFIED

UNCLASSIFIED

TACTICAL SCHEMATIC DRAWING. COUNTERINSURGENCY



6

Inclosure 1 to Annex J

UNCLASSIFIED

29  
30 Best Available Copy

UNCLASSIFIED  
ENGINEER JAMES

1. AIRFIELDS

a. Just as roads are the lifeline for the continuing support of ground operations, so are airfields the lifeline for support by air. Plans were made and achieved to construct new airfields or upgrade old ones throughout II Corps Tactical Zone in such a pattern that an operation anywhere in the zone could be supported successfully from an airfield. The helicopters in use to support operations are most efficient operating at a radius of 40 kilometers or less. This led to the concept of constructing a network of C-130 capable airfields, one every 80 kilometers throughout the II Corps Tactical Zone. To further reduce helicopter blade-time, close-in C7A aircraft capable airfields were built to support specific operations. As of July 1967 a total of 74 active airfields had been constructed or upgraded, of which 40 were capable of receiving C-130 aircraft. The remaining 34 were capable of taking C-7A or C-123 aircraft.

b. In the type of war we have experienced in Vietnam, it can never be assumed that once an operation is successfully concluded, the area will henceforth continue to be cleared of the enemy. Experience has shown that airfields have normally been utilized frequently either in support of new operations, or for logistical reasons, long after the initial purpose has ended. Whenever possible, however, an operation should be supported by road.

2. ROADS

a. The heart of any successful operation or campaign is the road not that sustains the logistics resupply to keep the momentum going against the enemy. Roads must be kept operational. Foresight must be given to repairing roads during the dry season to hold up during the rainy season. It is almost impossible, or at least very expensive, to repair a road during the rainy season. New roads should be planned and engineers apprised of the urgency to get them constructed as soon as possible when an operation begins. Examples of what have been done in II CTZ in these respects are:

(1) Repair and upgrading of 150 KM national and provincial routes west of Pleiku City to support continuing operations in the vicinity of the Cambodian border.

(2) Repair and upgrading of 171 KM national and provincial routes in Binh Dinh Province to support continuing operations.

UNCLASSIFIED

30  
110 Best Available Copy



b. There are approximately 1710 KM of national routes and an estimated 1235 KM of provincial roads within II Corps Tactical Zone. Their usefulness has been limited due to low design criteria and heavy enemy damage. Of prime importance in the support of all aspects of our operations has been the rehabilitation and upgrading of these road networks, with particular emphasis on the major arterial routes. This road opening program resulted in the repair and upgrading of two important national highways that had been severely damaged by the enemy: QL-1 from Phan Thiet near the II-III Corps boundary in the south to the I-II Corps boundary in the north (516 KM); and QL-19 from the vicinity of Qui Nhon on the South China Sea to Duc Co near the Cambodian border in the west (226 KM). The opening and maintenance of these two main arteries, as well as other important routes, have caused an upward surge in the economic life of the Vietnamese communities astride these routes. As of this time approximately 89 percent of the main roads throughout the area have been repaired to the extent that they are passable to vehicular traffic. This situation has brought courage and confidence to the people affected, although security still remains a problem along certain stretches.

### 3. AIRMOBILE ENGINEER EQUIPMENT

a. For successful operations against the enemy, landing zones, fire support bases, and forward landing strips must be developed and expanded into enemy territory. Clearing and developing these areas must be accomplished by airtransported tools and equipment. The use of hand tools, power saws, and explosives is a slow and physically exhausting process. This has been particularly true in the thick, hardwood areas found in the II Corps Tactical Zone. To overcome this situation, light weight airmobile engineer construction equipment like that issued by the engineers of the 1st Cavalry Division (AM) has proven invaluable. This equipment, complete or sectionalized can be heli-lifted into areas not accessible by LOC. Lightweight bulldozers, graders, scrapers, front loaders, rollers, and even small dump trucks have proven particularly useful. On numerous occasions this equipment has been lifted to mountain tops or into remote jungle areas or into enemy dominated territory to clear and develop landing zones, fire support bases, and fixed-wing aircraft landing strips. In April of this year, this equipment was heli-lifted into an inaccessible area in the Quang Ngai Province and constructed a C-123 aircraft capable airstrip in 72 hours. On another occasion light weight bulldozers were heli-lifted into the jungle pass in the western Pleiku Province to expand fire support bases and landing zones. Additionally this airmobile engineer equipment has proven invaluable in the repair of remote airstrips where it is impractical to reach them overland.

UNCLASSIFIED

3T  
41

UNCLASSIFIED

b. A strong recommendation has been made to obtain more of this useful equipment for employment in Vietnam, where rapid access to remote areas by air is essential. Delays in responding to this urgent request appear to be excessive.

UNCLASSIFIED

3

ANNEX K

32  
42

Best Available Copy

# CONFIDENTIAL

## HERBICIDE PROGRAM

1. (U) Headquarters, I MACV oversees US supervision over the herbicide program within II CFM. This responsibility includes monitoring and establishing the senior advisor's position on all herbicide project requests. In addition, projects in support of OPFII units are evaluated and processed.

2. (C) Herbicide project processing procedures currently require from four to six months. To increase the responsiveness to the needs of the commander IMAV has requested CG, II CFM, to approve a large area herbicide project which includes all known VC/NTA infiltration routes, ambush points and secret base areas. Specific targets within this project can be requested with a reaction time of days rather than months.

3. (C) The importance of the herbicide program within II CFM has been stressed to US/FMAF commanders, as well as to the GVN officials. As the value of this program has been recognized, project areas have been expanded more than 50 percent over the CY 66 program.

4. (C) The herbicide effort is divided into crop destruction and defoliation. Each is unique but equally important. Crop destruction is undertaken to bring the population under GVN control and to deny food resources to the VC. During 1966, over 20,000 short tons of rice and other crops were destroyed. During Jan-Jun of 67, approximately 26,837 short tons of rice and other crops were destroyed. Intelligence reports indicate that this effort has seriously hampered VC operations. For example, in Binh Thuan Province the VC were forced to move from a base area because of food shortages.

5. (C) Defoliation is used to improve visibility for observation of VC/NTA infiltration routes and base areas, for US base camp security and for route security. During 1966 approximately 84,800 acres were defoliated. During Jan-Jun of 67, approximately 117,414 acres were defoliated.

DECLASSIFIED AT 5 YEAR INTERVALS  
1 DECLASSIFIED AFTER 12 YEARS  
EOB DIR 5200.10

Annex L

CONFIDENTIAL

43

Best Available Co

# CONFIDENTIAL

## PERSONNEL ROTATIONAL HUMP PERIODS

1. (C) Combat units which have deployed to RVN have been faced with serious problems of personnel hump rotations. Last year the 1st Cavalry Division (AM) experienced a heavy rotational hump during the summer months. Likewise, the 1st Cavalry and 4th Infantry Divisions are faced with a similar problem again this summer. Attached as an inclosure is a statistical review of the gains and losses as experienced in 1966 and also the projection for 1967. The greatest concern is the effect it will have on the capability to continue tactical operations during periods of tremendous personnel turbulence. Additionally, this situation occurs during the southwest monsoon season which the enemy has continuously used to his advantage in Pleiku and Kontum Provinces. This undesirable situation requires combat maneuver elements to face the enemy with individuals who are not familiar with enemy tactics, terrain and climatic conditions, and who have not worked together as a team.

2. (U) There are many difficulties involved in maintaining a desirable strength posture. In this regard, much progress has been made toward minimizing the adverse effects of rotational humps through infusion, overstrengths, voluntary extensions, and curtailments. However, continued emphasis should be given this matter to preclude heavy personnel rotations during a period which affords the enemy his greatest advantage and while we must reorganize and train large numbers of inexperienced personnel.

1 Incl  
Gains & Losses 1966 & 1967

# CONFIDENTIAL

GROUP 1  
DOWNGRADE AT 3 YEAR INTERVALS  
DECLASSIFIED AFTER 12 YEARS

ANNEX M

34  
44

Best Available Copy

**CONFIDENTIAL**

ACTUAL GAINS AND LOSSES

1966

	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>
1st Cav Div (AM)					
GAINS	1893	4257	2814	809	9773
LOSSES	1323	4561	2651	432	8967

ACTUAL AND PROJECTED GAINS AND LOSSES

1967

	<u>ACTUAL</u>			<u>PROJECTED</u>		<u>OVER/SHORT</u>
	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>TOTAL</u>	<u>As of 30 Sep 67</u>
1st Cav Div (AM)						
GAINS	2433	2064	1475	1391	7363	-605
LOSSES	1489	3309	2630	2305	9733	
4th Inf Div (-)						
GAINS	1574	2895	2824	2968	10261	+1178
LOSSES	1415	2720	1985	3522	9642	

**CONFIDENTIAL**

GROUP 4  
DOWNGRADE AT 3 YEARS  
DECLASSIFIED AFTER 12 YEARS

Inclosure #1 to Annex M

# CONFIDENTIAL

## PRISONERS OF WAR

1. (U) ARVN has been, and continues to be responsible for the PW internment program with the assistance of MACV Advisory personnel. US Forces maintain an interest in US captured PW's evacuated to ARVN PW camps. Proper screening, classification, and documentation of captured personnel are required to extend the protection granted under the Geneva Convention.

2. (U) During the initial phase of PW operations in II CTZ problems with classification, evacuation, and internment were encountered that were not anticipated in early planning. A standard definition of PW was not obtained until late January 1967. This materially assisted in proper classification of PW; however, recent screening conducted by MACV/JCS teams at Pleiku PW camp revealed that classification of over 300 PW's is in doubt because of lack of required documentation or substantiating data. OPCON units have been directed to comply with published directives on PW's. In order to reduce errors in classification, DSA, II Corps provides this headquarters with identity and discrepancies involved on US captured PW's processed at II Corps PW camps. Corrective action is then taken.

3. (C) Evacuation of US captured PW's was unsatisfactory prior to the opening of the first PW camp at Pleiku in October 1966. They had to be delivered to overcrowded Province and District jails, which lacked facilities for proper treatment. Evacuation again became a problem in March 1967 when the PW camp was quarantined because of meningitis. PW's were held in unit collecting points up to a period of a month awaiting clearance from CG, II Corps and permission from MACV/JCS to evacuate them to other Corps camps. At one time there were 425 PW's being held in collecting points. Seven hundred and thirteen PW's were evacuated from US and ROK collecting points to I, III, and IV Corps during the quarantine period. During PW evacuations to other Corps PW camps, combat essential aircraft was required to move prisoners from the 1st Cavalry Division (Air Mobile) PW collecting point in order to reduce a security hazard and to meet a short movement notification from MACV. Since opening of the PW camps, I FFORCEV has coordinated the evacuation of over 3000 PW's to various Corps PW camps. ROK forces continued to deliver PW's to GVN officials after the Pleiku camp opened. Our efforts to dissuade them from this practice and evacuate to the PW camps has been successful. The delay in evacuating PW's under emergency conditions points out the necessity for establishing a simplified evacuation procedure.

4. (U) There are two PW camps in II CTZ, located at Pleiku and Phu Tai. Phase one of the Pleiku PW camp opened for the receipt of ARVN captured PW's in early September 1966 and for US captured in October 1966. The second phase of this camp was completed in May 1967 giving the camp a total capacity of 2000 PW's. It presently has a population of 1705 PW's interned. The Phu Tai camp was completed on 31 May 1967 and received the first PW's on 4 July 1967. The capacity is 1000 PW's, and it presently has a PW population of 136. Opening

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FFORCEV  
DATE 30 JUL 67

1

DOWNGRADED AT 3 YEAR INTERVALS  
DECLASSIFIED AFTER 12 YEARS  
DOD DIR 5200.10

ANNEX N

CONFIDENTIAL

36 46

Best Available Copy

CONFIDENTIAL

of both of these camps was delayed for periods of a month or more because of the lack of urgency and supervision on the part of ARVN to meet scheduled completion dates.

5. (C) Security procedures at the Pleiku camp both internal and external have not been up to standard. This became evident in early May 1967 when information was received of a possible breakout at the Pleiku camp. To supplement ARVN, US combat troops were required to provide back up forces to assure a minimum security posture. In July 1967, 500 NVA and hard core VC PW's were transferred from the Pleiku camp to the Phu Quoc Island camp. This points out the necessity of establishing and maintaining good informant nets within PW camps, the requirement for alert guard forces, adequate security measures, and timely transfer of possible troublesome PW's.

6. (U) A program to continue screening of District and Province jails in II CTZ is required to identify PW's in confinement and transfer them to PW camps in order to insure compliance with the Geneva Convention.

7. (C) CG, II Corps has expressed a desire to construct a PW camp on Hon Tre Island in Nha Trang harbor. This camp is considered unnecessary. The planned expansion of the Phu Quoc Island camp to hold 10,000 PW's together with the 2000 PW capacity of Corps PW camps appears to provide adequate facilities for the foreseeable future.

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN NATIONALS  
BY AUTHORITY OF CG I FORCE  
DATE 30 JUL 67

2

ANNEX N

47

DOWNGRADED AT 3 YEAR INTERVALS

DECLASSIFIED AFTER 12 YEARS

DOD DIR 5200.10

CONFIDENTIAL

Best Available Copy

# CONFIDENTIAL

## TRANSPORTATION

### 1. (U) Transportation Progress:

Significant progress has been made in the area of transportation during the past year in II CTZ. Early in the war, deployment of tactical forces was accomplished by air; however, as the road network improved, movement by land transportation increased. Multi-battalion size task forces are now being deployed into tactical operations by land, sea, and air transportation and in most cases continuous resupply by land transportation has been accomplished in support of these units. The responsiveness of sea transportation has greatly improved. The entire 1st Bde, 101st Abn Div was deployed recently into the TF Oregon Area of Operation by ISTs.

### 2. (C) Transportation Developments:

a. The entire transportation network within the II CTZ has greatly improved. Tactical commanders enjoy the largest secure highway and rail complex in Vietnam. As a result of this expansion the longest road march conducted in Vietnam was the move of the Cavalry Troop of 1/101st Airborne Division from Kontum City to Phan Rang, a distance of 563 kilometers.

b. C-130 airfields have been constructed within a radius of approximately 60 kilometers of each other for the rapid deployment of tactical forces throughout the entire II CTZ. The fastest deployment of a brigade size unit in Vietnam was accomplished by C-130 aircraft when 199 sorties were completed in 47 hours in moving the 1st Bde, 101st Abn Div from Tuy Hoa to Kontum. The heaviest single airdrop in Vietnam, 28,700 lbs from a C-130 aircraft, was conducted in the II CTZ.

c. Improved port facilities permit wider use of sealift. The battalion task force in Binh Thuan Province is supplied almost exclusively by sea. Heavy artillery batteries are moved by IST when road conditions deny overland movement.

d. These developments in the modes of transportation have provided the tactical commander a selection for the best means of deploying his forces into combat operations.

ANNEX C

Downgraded at 3 Yr  
Intervals Declassified  
After 12 Years

# CONFIDENTIAL

48

38

Best Available Copy



UNCLASSIFIED

SUPPLY

1. Ammunition available supply rate control at the Field Force level: In January 1967, HQ IFFV requested authority from USAFV to control ASR allocations for assigned and OPCON units. Approval was granted during the same FY quarter and implemented using the following procedure:

a. The allocation is made to IFFV for a 30-day period computed on weapons densities or specific number of mines, chemicals or pyrotechnics per brigade.

b. HQ IFFV makes allocations to assigned and OPCON units on a bi-weekly basis. Unit allocations are computed on weapon densities, missions and past usage figures...

c. A reserve is maintained by HQ IFFV which is used to supplement the unit allocation, if exceeded.

2. The advantages of placing ASR controlled ammunitions at the FFORCEV level:

a. Closer liaison is maintained between IFFV and assigned and OPCON units receiving ASR ammunition credits.

b. The number of units dealing directly with USAFV ammunition personnel has been reduced to the two US and one ROKFV FC Headquarters.

c. Additions or deletions to the ASR can be disseminated to IFFV levels within a matter of minutes, whereas the old system from USAFV direct to separate brigades and divisions required several hours.

d. A two-week allocation period provides flexibility, in use of controlled ammunition, to division or separate brigade commanders in planning tactical operations.

e. Since the implementation of this program, units of IFFV have not exceeded any of the initial monthly allocations from USAFV.

3. Problem Areas in ARVN Supply System: The overall logistical situation of ARVN Class I, III, and V supplies and their transportation has improved considerably since the beginning of calendar year 1966. Progress of a lesser degree, has also been made in the Class II and IV areas.

a. The ARVN supply system is technical service oriented, and the separate services have not completely learned to function together as a team.

b. The Class II and IV supply system still suffers from a slow initial response to requisitions, slow processing of requisitions and slow

1

Annex P

UNCLASSIFIED  
49 39

Best Available C

UNCLASSIFIED

transportation arrangements. Considerable time is expended at the province level consolidating routine requisitions and at the divisional level in approving them.

c. Further delay is encountered at the Area Logistical Command level such as the II ALC Qui Nhon and the V ALC Nha Trang. Only top priority combat essential supplies are rapidly dispatched. Experience has shown that it usually takes two to five months for a routine Class IV barrier material requisition to be filled, while a combat essential requisition of higher priority Class I, III, and V supplies may be filled literally overnight. This slow movement of lesser priority Class II and IV supplies has been speeded up to some extent by US advisory personnel monitoring and by the arrival of sufficient supplies at the Area Logistical Commands in the II CTZ.

d. The limited amount of these supplies on hand has been a contributing factor to the supply problem in the past. This situation is being corrected, however, since more supplies are being made available through MACV channels either from Saigon or by direct shipments from CONUS.

e. Further improvement is expected when the Vietnamese supply personnel, under the influence of US advisors, become more experienced in proper supply procedures and priorities for their distribution.

UNCLASSIFIED

CONFIDENTIAL

UNCLASSIFIED

1. (C) Support of Non-Standard Equipment:

a. During the past year, considerable difficulty has been experienced in providing adequate logistical support to psychological operations. Psy-Ops units are equipped extensively with non-standard equipment such as commercial audio-visual "Jeepsters", multilith printing presses, Japanese tape recorders, and other related audio-visual devices of a commercial nature. Support problems have included:

- (1) A lack of repair parts and expendable supplies in normal supply channels.
- (2) The lack of a clearly defined procedure for obtaining non-standard repair parts.
- (3) Lack of responsiveness in obtaining parts and expendables on a timely basis through commercial procurement channels.
- (4) Lack of parts and servicing manuals.

b. These problems have been brought to the attention of higher headquarters, and there is now evidence of a greater awareness on the part of all concerned. Since 1 June a number of corrective actions have been initiated to include:

- (1) Designation of a single support unit to provide centralized repair service (contractor augmented).
- (2) Accumulation of a USARPV-wide equipment density listing from which an initial depot stockage of repair parts has been computed and ordered.

2. (C) Mechanization of 2nd Bn, 8th Infantry, 4th Infantry Division:

USARPAC approved conversion of the 2nd Bn, 8th Inf, 4th Inf Div to a mechanized configuration. This unit was one of three such units converted in-country. Since this unit was given the lowest priority of the three for distribution of equipment and repair parts, it was necessary to establish specific controls and conditions to prevent premature commitment of this unit until it was logistically possible to support mechanized operations. Quantitative parameters were established for personnel, training, equipment, tools, and repair parts (both PLI and ASI). Although an exception to this policy was made authorizing the 4th Inf Div to employ 10 APCs in a route reconnaissance and security role, actual conversion of battalion did not begin until 15 April 1967. Conversion was completed on 5 May 67. Delay in conversion was attributed to non-receipt of sufficient repair parts and special tool sets.

CONFIDENTIAL

INEX Q

51

Downgraded at 3 1/2 years  
Declassified at 5 1/2 years

Best Available

UNCLASSIFIED

MEDICAL

1. Aeromedical Evacuation:

a. Under conditions found in Vietnam, where dense jungle interferes with landing a helicopter ambulance, the mechanical hoist must be used to raise casualties to the helicopter. The hovering aircraft becomes a stationary target for enemy fire while the rescue operation is underway. It was found, therefore, that all medical evacuation hoist missions should have gunship support.

b. On a number of occasions the UH-1D helicopter has been unable to hoist wounded personnel from dense jungles in areas of high altitude in the II CTZ. Under high altitude and high temperature conditions, the UH-1D helicopter can not hover satisfactorily to perform hoist operations. A study of the problem demonstrated a need to replace the L-11 engine in the UH-1D with the new model L-13 engine. Currently, the UH-1H with the L-13 engine is being phased into the MedEvac program as it becomes available. Six of these new aircraft are stationed in the central highlands; and, at least initially, they seem to be showing good results.

2. Disease in South Vietnam:

a. South Vietnam is a plague and cholera endemic area. During June 1967, there were 52 cases of plague and 98 cases of cholera in II CTZ (not all provinces reporting). To date, there has been no outbreak of plague or cholera among US troops. These facts point out the need to continue the active immunization program and high sanitary standards of US military troops in Vietnam.

b. Malaria continues to be the major cause of personnel loss through disease to combat units in Vietnam. The major I Field Force Vietnam US combat units accounted for 2,763 malaria cases for the period 1 January through 30 June 1967. (From 1 January - 30 June this includes 1st Cav Div and 4th Inf Div, from 1 January - 31 May 101st Abn Bde and 3/25th Inf Bde, and from 1 June - 30 June 173d Abn Bde). In 1966, the number of cases totaled to 5,450. Preventive measures continue to be stressed at all command levels, and all US combat troops in II CTZ are taking both the Chloroquine-Primaquine and Dapsone Tablets. The malaria rates compare favorably to those figures during World War II when whole infantry divisions in the South Pacific had to be removed from combat for rehabilitation because of the high incidence of malaria.

Annex R

UNCLASSIFIED

52

Best Available Copy

UNCLASSIFIED

Security Classification

## DOCUMENT CONTROL DATA - R &amp; D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) HQ DA, OACSFOR, Washington, D.C. 20310		2a. REPORT SECURITY CLASSIFICATION CONFIDENTIAL	
		2b. GROUP 4	
3. REPORT TITLE Senior Officer Debriefing Report: <del>Stanley R. Larsen</del> V - 1 August 1965 - 31 July 1967 (8)			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Sr. Officer Debriefing Rept, CG, IFFV, August 1965 to July 1967.			
5. AUTHOR(S) (First name, middle initial, last name) LTG Stanley R. Larsen (11 Jul 77) 56 p.			
6. REPORT DATE 31 July 1967		7a. TOTAL NO. OF PAGES 53	7b. NO. OF REFS
8a. CONTRACT OR GRANT NO.		8b. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO. (18) N/A OACSFOR		(19) OT-UT-67B011	
c.		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT			
11. SUPPLEMENTARY NOTES N/A		12. SPONSORING MILITARY ACTIVITY DA, OACSFOR, Washington, D.C. 20310	
13. ABSTRACT			

Best Available Copy